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REDECORATION OF THE SOCIETY'S HOUSE

It is regretted that the work of redecorating much of the Society's House, now being carried out, which includes final repairs to war damage, must interfere to some extent with the use of the library and parlour by Fellows. It is hoped that all the work will be finished by the end of this month, but both these rooms will inevitably have to be closed during part of it.

BICENTENARY RECEPTION

Fellows are reminded that, as was announced in the *Journal* on 25th June, the Bicentenary Reception will be held at St. James's Palace on the evening of Wednesday, 15th December, and that applications for tickets must be received by Monday, 1st November.

Fellows may apply for tickets (which are free) for themselves and their ladies (or escorts in the case of lady members). A ballot will be held if necessary.

DESPATCH OF JOURNALS IN ENVELOPES

Special arrangements for posting *Journals* flat in envelopes instead of in the usual postal wrappers are made in cases where Fellows require, for subsequent binding purposes, that their *Journals* should arrive unfolded. Fellows wishing to take advantage of this arrangement are asked to notify the Secretary.

THE SOCIETY'S CHRISTMAS CARD

An order form for the Society's Christmas Card for 1954 is included at the end of this issue of the *Journal*.

THE DESIGN OF NEW SCHOOLS

The Alfred Bossom Lecture by

C. H. ASLIN, C.B.E., F.R.I.B.A.,

*County Architect, Hertfordshire County Council,
delivered on Wednesday, 19th May, 1954,
with Sir Griffith Williams, K.B.E., C.B., late
Deputy Secretary, Ministry of Education, and a
Member of Council, in the Chair*

THE CHAIRMAN: Before I introduce the speaker I have to read a letter from the Minister of Education, Miss Florence Horsbrugh, who presents her compliments to the Royal Society of Arts and regrets that she cannot after all be present at the Alfred Bossom Lecture, which she had hoped to attend to-day. We are very sorry that she cannot come.

It is a very great privilege for me to welcome here on your behalf Mr. C. H. Aslin, County Architect for Hertfordshire and the new President of the Royal Institute of British Architects. The lecture you are going to hear to-day is the second Alfred Bossom Lecture, founded by Sir Alfred Bossom, and I think the choice of subject is extraordinarily happy. The revolution in school buildings which has taken place since the war is one of the most remarkable things in recent history. Therefore it is very fortunate that this Society should bring to us such a great authority on the subject to tell us what has been happening.

Mr. Aslin has two special qualifications to talk to us on this subject: first of all because Hertfordshire was in the van in the design and building of new schools, and I believe I am right in saying that only recently the county completed its hundredth school built since the war; the second qualification is that Mr. Aslin sent to the Ministry of Education, if indeed he did not train, its brilliant Chief Architect, Mr. Johnson-Marshall, who has presided over the development group and who has been so largely responsible with the local authorities for working out the new principles of design. For those two reasons, if for no others, we welcome Mr. Aslin here to-day to talk to us on this extremely interesting subject. I am sure that those who have been closely connected with the work—and I am glad to see some of my old colleagues here, including Mr. Johnson-Marshall—will be particularly interested.

The following lecture, which was illustrated with lantern slides, was then delivered.

THE LECTURE

Before noting what has been done in this country since the war it would perhaps be profitable to note why this subject is of such wide interest to the public, educationalists and architects. Up to the end of the war the country had a system of compulsory primary education, with the result that education authorities had a duty to provide buildings for elementary education, but for

secondary education they were free to determine what buildings appeared to be necessary.

The 1944 Education Act, however, made a sweeping change in that education authorities were given the task of providing secondary education for all; with the result that it became necessary to provide a very large number of additional schools. In addition, the war left us with a number of damaged and destroyed buildings to replace, and the swelling birth-rate after the war gave rise to a demand for large numbers of primary schools.

Another aspect of this problem was the dispersal of population, particularly in the Home Counties from Greater London, in L.C.C. housing estates and the new towns, and in these places new schools both for primary and secondary education had to be provided for the new-comers. The magnitude of the task throughout the country can be judged by the fact that the Ministry of Education has been spending through local authorities approximately £50 million a year on school buildings. These conditions created what was probably the largest architectural task ever undertaken by public authorities, and it is to the credit of all concerned that so large a part of it has been completed.

All the great contributions to the architectural worth of this country, or indeed of any country, have been produced by a combination of first-rate clients and competent architects. It is too early to say whether any real architectural contribution has been made, but we can at least say that the conditions for producing it are present. It will certainly be a very black mark against the profession if the opportunity afforded by this huge programme has not been put to such good purpose that some considerable contribution has been made, both in the field of architecture and the development of new techniques. In other words the programme has provided a unique opportunity for a major contribution to twentieth-century architecture, and it is hoped that time will show that the fullest possible use has been made of it.

It is, of course, more difficult for architects to work with the public as a client than with private individuals, because of the inherent problem of getting an appropriate brief with a client so nebulous as the public. On the other hand, the task has been run as a combined operation with the education authorities, the Ministry of Education and education staffs (which include all interested parties such as supervisors, headmasters and headmistresses, and teaching staff), each contributing their own specialized knowledge to enable a satisfactory brief to be prepared.

The Ministry of Education has contributed very largely in two ways. In the first place, regulations have been eased thus giving the architects greater freedom to provide suitable buildings, and the time for approval has been very much reduced; and, secondly, the Ministry has set up a staff of architects in its own department, who have not only helped materially in the way of producing approvals, licences and the like, but have themselves erected and are still erecting a number of school buildings from which they can become acquainted by experience with the practical problems which assail the architects building schools for local authorities.



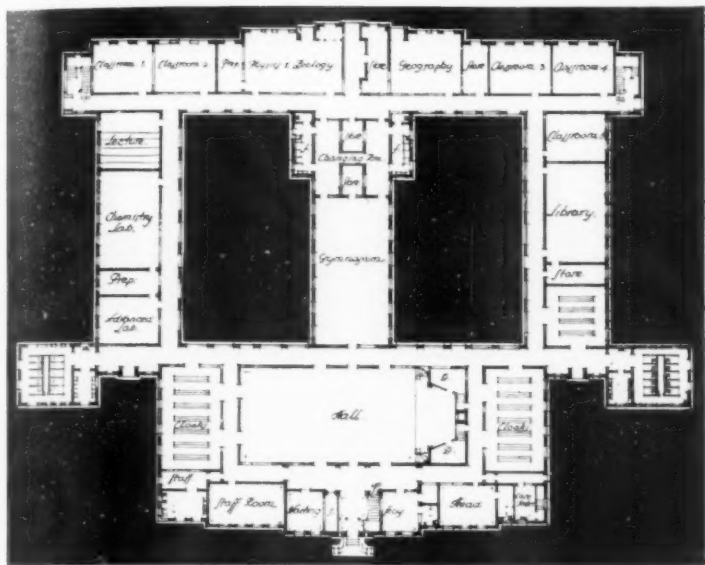
The elevation of a typical pre-war school showing the monumental approach which was prevalent before the war

The problem was not only one of producing an appropriate number of new buildings, but of producing them quickly, because nothing could be worse than having children in any locality without sufficient school buildings to house them. This matter of speed naturally presented a grave problem, because, as will readily be appreciated, immediately after the war there was a tremendous shortage of building materials and building labour, and the designers, therefore, necessarily had to turn their attention to new techniques, new materials, and the provision of new labour, in an attempt to satisfy the time factor.

The object of pursuing new techniques was to cut down the work on the site by the provision of components made under good conditions in factories, and their speedy erection by the operatives who made them; leaving only such site works as drains, roads and foundations, to be carried out by normal methods.

It can be said that this new approach has succeeded in providing much faster building at prices within the Ministry's approved range, although considerable savings in cost have not yet been effected because a number of the materials used, being new, are relatively expensive. There is, however, every reason to hope that, since a large number of designers, manufacturers and builders have become interested in the method, in due course there will be greater selection of materials, and the costs will drop.

It will, of course, be pointed out that in various parts of the country the use

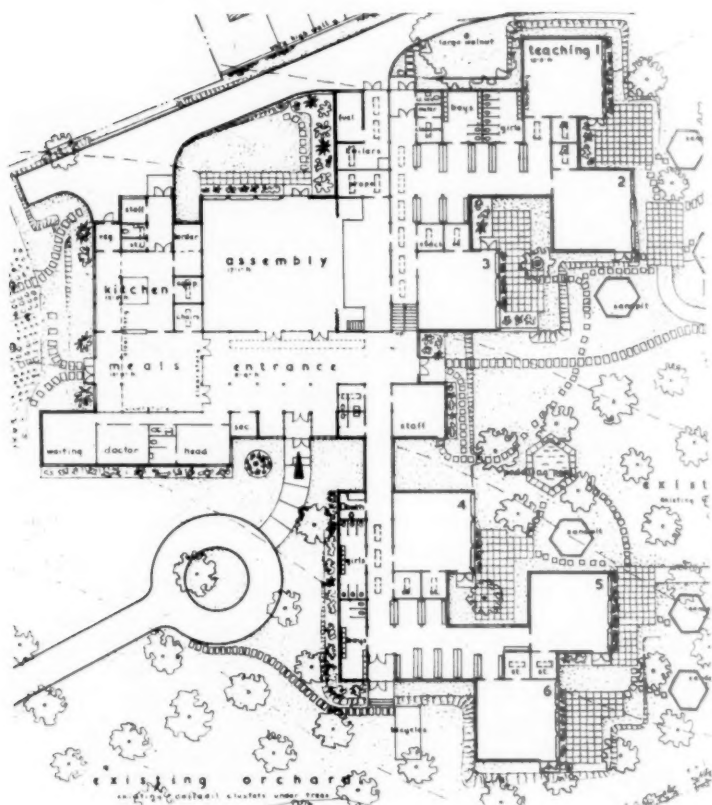


The plan of the school illustrated opposite, again showing the monumental approach

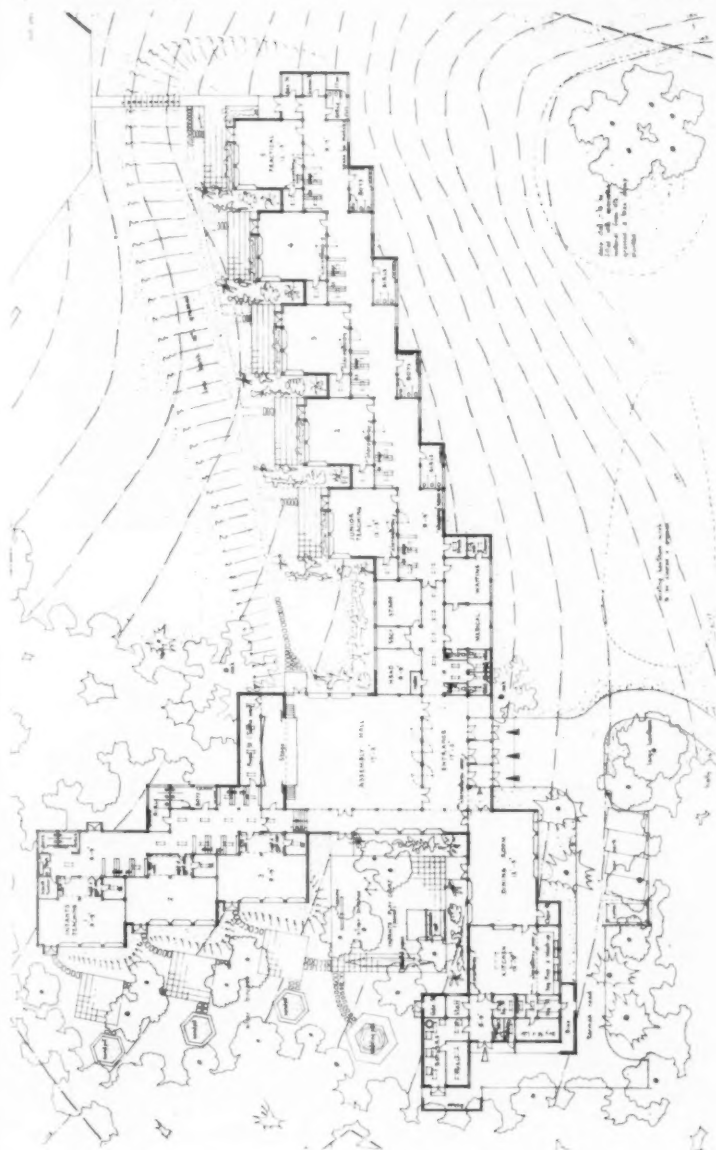
of—for want of a better term—‘traditional methods’ has resulted in the provision of buildings at no greater cost; this, however, is only true of areas in the country where the demand for materials and labour has been less than in others. In the Home Counties, the demands of Greater London, the New Towns and the L.C.C. housing estates, have been such that without the introduction of new methods, new labour, and the cutting out of as much site labour as possible, the contribution to the school programme would have been practically nil.

It might be appropriate at this stage to supply a little more information as to what is meant by ‘new techniques’, and what connection they have with the present school building programme.

In this age of highly developed mechanization it would appear to be appropriate that the building trade should gain some advantage from such an outlook, and remove itself from the position of having to work under conditions which are probably worse than those in any other industry. Buildings are necessarily constructed in the open air, and labour and materials suffer from the variations in weather conditions and the general discomfort arising from these circumstances, especially when compared with the comfort and high efficiency which can be gained by workmanship in well heated and lighted factories. It was,



A school at Aboyne Lodge and (opposite) one at Pentley Park, Welwyn Garden City (1950). These plans indicate the type of flexibility which the modern method of modular approach can give to various sites



Pentley Park



A photograph of part of the school at Aboyne Lodge, a plan of which is shown on page 808

therefore, considered that the way to rationalize building construction was to manufacture in comfortable, and therefore more efficient, conditions as many parts of a building as possible, leaving as little time as was practicable to be spent on the actual site.

The introduction of this method of reorganization of the building industry ties up quite naturally with the large educational programme, because it would be quite impossible to put it into effect without a large and continuing volume of work being placed in the hands of manufacturers, who could be persuaded that such rationalization was not only sensible, but a good business proposition. This approach to building has been used almost imperceptibly during the last fifty years, and commenced with specialists making such things as joinery, standard windows, and indeed standard everything which could produce the goods as well as or better than the individual builder, and at a price which was attractive. It was only a small step from this natural development to an attempt to rationalize the whole building and to produce a condition where most of the materials needed can be pre-made and transported to the appropriate site where they are in fact needed.

This method has another very important and attractive result in that new labour, as an additional force to the building industry, is provided in factories, and this new labour is also provided on sites, if the people who make the various

parts also fix their goods in the building. This method has been loosely referred to as 'prefabricated' as opposed to what is again loosely called 'traditional methods' of building, but if the matter is looked into more deeply I am sure it will be agreed that this approach is appropriate to the mechanized age in which we live, and ultimately will be seen to fall into a pattern of a continuing tradition.

Another result of this approach is the high degree of co-operation required between manufacturers, engineers and architects, which results in better design, more economical production and a very large elimination of the waste which has always been associated with the industry. In the past both labour and materials have been relatively cheap and there has been no real incentive to economize or to make any real attempt at eliminating wasteful design, and it seems clear that under modern conditions more and more mechanization must be introduced into building operations in order to reduce costs and increase production. This will become increasingly necessary as costs of labour and raw materials continue to rise: indeed in a modern community the tendency is to aim at higher standards of living for all, and the cost of labour must always tend to increase; so it is essential to use more rationalized methods in building, in order that building prices will not continue to rise. If they do, it is inevitable that a position will arise where the client, whether it be the public or a private individual, will be compelled to restrict building with consequent disaster to the building trade.

At this stage it would be appropriate to enquire what main changes have taken place in school design, and we shall find the answer not in the various detailed alterations which have been made in planning since the inter-war years but in the complete change in outlook of the profession.



A recent two-story school where modern methods have been used

Before the war we had somewhat rigid regulations about the number and sizes of classrooms, which were issued by the Board of Education, and a skilful approach by the architect, with ability to combine the various units into a formal pattern, was required to build the whole into a miniature monumental structure. There was little or no critical approach or guidance from the educationalists, and there was certainly no realization that the real client was a child whose environment was being fixed for the duration of its school life; nor was any real attempt made to provide a building in which teaching staff could operate to the fullest advantage. This rather negative approach has fortunately been completely superseded, and attempts are constantly being made to provide a building which is in scale with the child and where every part of the structure endeavours to provide a working place where the business of educating the young can be carried out to the greatest advantage to them. In other words, school buildings of later years have an external appearance which grows out of planning for use, and this is quite the reverse of the formal approach where the structure was designed as a building to look at and where it was hoped that the result would be a building in which teaching could be carried out adequately.

It is frequently said, and quite correctly, that head-teachers and staff make a school, and that good design will not by itself produce one. It can be claimed, however, that a building appropriately designed can offer the environment in which good staff can be helped and improved in quality of attainment by good architectural environment, instead of good staff having to fight constantly against inherent disabilities in the building.

If I am correct in this assumption, what effect has the new approach had on recent school buildings? The standard of pre-war structure, with its long corridors, rectangular classrooms and adult-scale buildings and furniture, has given way to a fluid pattern of rooms with almost total elimination of circulation space, and a real attempt to give both the structure and its contents an appropriate scale to fit the small people who inhabit it for the greater part of their early years.

There is another point which is worth the consideration of the profession, and I may be permitted to mention it here, and that is the repercussions of this programme on architecture generally.

It is true to say that it is not only the school building programme which has had a tremendous impact on architects, for it is a fact that since 1945 especially, and generally since 1919, more and more building of every sort has been carried out by architects employed in government and local government offices.

In the early days of this century, by far the greatest percentage of work in this country was carried out by private architects for private individuals and organizations. It is true that at that date local government organizations had authority to build a variety of structures such as schools, markets and other buildings connected with the requirements of the various operations for which they were responsible. The first large scale building for which local authorities were responsible by statute was housing, but since 1919 the volume of work they have had to undertake has increased, until the 1944 Education Act increased

not only the volume which it was permissible to do, but also, enormously, the volume which they were compelled to do by Act of Parliament. The effect of this has been to produce a programme which could be carried out either by architects in private practice or by departments set up by the local authority.

The bulk of authorities have elected to carry out the work by the latter method though most of them have, in addition, been able to provide commissions for private practitioners. What all this means to the profession is that whereas at the beginning of the century by far the greatest part of the commissions was carried out by private practitioners, at the present time the position is becoming reversed. Indeed fifty years ago the profession was roughly divided into two parts—qualified architects who carried on practices; and a large number of people who were known as architectural assistants whose knowledge was gained by practice and who had no prospect of becoming practitioners in their own right, and they were content to accept posts assisting architects with no thought of ever doing anything else.

The position now, however, is vastly different, and all young architects enter the profession as qualified architects by examination, and they are able to act in their various degrees as fully qualified members of the profession from the moment they start. Their training and ability are naturally quite different from those of the people in the past who were content to act as assistants to qualified architects, and this fact creates the new problem in the profession of how they should be remunerated.

It is quite clear that none but a tiny proportion of those who enter local government service can hope to obtain the better paid and more responsible posts, but it is clear that by virtue of their training and qualities they ought to be paid at a higher rate than that which has, in the past, been offered to the assistant working under the immediate direction of a qualified architect. Some method must be discovered of appropriately rewarding architects in this new pattern, which, so far as one can possibly say that anything is permanent, appears to have come to stay, because now that we live in a community which is largely controlled by the central government, it is difficult to believe that in a reasonable space of time we shall get back to an economy which is even largely controlled by private enterprise.

All this may not appear to have anything to do with school building since the war, but educational building, the demand for which is caused by the policy adopted by the Government, is only part of the force which is changing the pattern of the profession of architecture.

DISCUSSION

MR. E. M. RICH, C.B.E., F.C.G.I. (A Vice-President): We were not shown the orientation of the school buildings in the slide illustrations I presume that the main lighting came from the south, south-east or south-west. I ask that question because between 1870 and 1880 there had been a series of very hot summers and consequently the London School Board built its schools with the lighting coming from the north. One of the early tasks the London County Council had to face from 1904 onwards

was to turn the classrooms round in some way so as to get the light from the south or south-east into them. Am I right in thinking that that is what the lecturer is doing with his buildings?

THE LECTURER: We certainly are; all the classrooms face as near as possible south or south-east. Every effort is being made to get them that way. Indeed our clients now would not permit of anything other than that.

MR. E. M. RICH: Another question I should like to ask is what kind of flooring does the lecturer use in the halls and classrooms, and are the floors scrubbed with soap and water and soda, or are they treated with oil?

THE LECTURER: Flooring has been a difficulty, of course, since 1945, owing to the inability to get what we wanted. Halls invariably have timber floors, and since hardwood came off the ration we have done better. In the early days we did have some Swedish timber. The classrooms, generally speaking, have been of thermo-plastic tiles, largely because they are cheap and we could not afford anything better. They have been treated in various ways, but I have never seen anybody use soap and water. We use a plastic dressing on wood floors which does not require regular polishing. Lino is quite frequently used, which is, in many respects, a better floor finish than some of the patent tile stuff. However, we did have the comic situation where, in the not-too-distant past, we were chopping up rolls of things to make them exempt from purchase tax! But that is merely an illustration of another peculiar kind of jaunt the architect has in these rather peculiar days!

MR. E. M. RICH: There is a third question, and it is this: what does a primary school nowadays cost per place? In 1905 the cost per place in a primary school was £20. Of course since then the amenities have improved out of all knowledge and the cost of labour and materials has gone up tremendously.

THE LECTURER: I think I am right in saying that the present cost is £146. It went up £6 last year owing to our inability generally speaking to meet the rising costs.

MR. JOHN A. SNELGROVE: What sort of heating is used in these schools, and what sort of thermal insulation is available?

THE LECTURER: When a question like that is asked I can only explain what we do in our schools, I cannot tell you what is done everywhere else in the country. The heating in the schools in Hertfordshire, invariably in the new schools, is what is described commercially as 'Weatherfoil', in other words it is a warm air job. Except for experimental purposes we have not used the ordinary low-pressure radiator system in new schools. Thinking in terms of thermal insulation and so on, it is an axiom that if you are using any kind of structure or material you must always look upon it in the same sort of way that our forebears looked upon bricks and mortar; you must not forget that there are such things as wind, rain, and snow, so that each new material, or the application of a new material, must be designed basically. In other words, you cannot take chances. If you can produce a material which is only two inches thick but which behaves as well as an eleven-inch cavity wall, you have obviously designed what is required, but it is no use having a shot, using an untried product and just hoping for the best.

MR. PHILLIP REECE: The lecturer mentioned that he used timber for the smaller schools, rather suggesting that he had only done so to save steel. I could think of some better reasons for using timber. What I should like to ask is, does he see any future in the use of timber in the larger schools?

THE LECTURER: I said that we used timber to save steel; that is perfectly true; that was the reason why the effort was made; that we found other things which were valuable in doing so is not denied. Is there any possibility or likelihood of timber being used in larger buildings? If the questioner is talking of structural use, I think the answer is no. Clearly timber is a load-bearing medium, but its qualities cannot be compared with those that are found in steel or reinforced concrete. I cannot imagine that tall block of classrooms I showed you being built with timber stanchions. However, there are plenty of uses for structural timber in single-storied buildings and, of course, for all kinds of finishings, both internal and external.

MR. R. TURNER: Could Mr. Aslin say whether, during his experiences in Hertfordshire, he has come to any general conclusion as to the appropriate number of stories for schools of general types.

THE LECTURER: Hertfordshire, as you know, is quite a rural county and most of the primary schools, that is to say the ones for children up to eleven years, are small. I think it would be ludicrous to have a three-storied building to contain about three hundred children when you could more conveniently do it in a single story. On the other hand in secondary schools, which are much larger in themselves, apart from usually having a few more children in them, I think there is a great advantage in going up. I see no hardship in a child of eleven years climbing a few stairs. Of course if you are going in for the comprehensive type of school which the London County Council use, owing to the conditions under which they are working, I think you must go up. However, I have no set views on it at all. I think that problem is one that should be posed to the educationalist as the client.

MR. G. J. HORSEFALL M.B.E., B.Arch.: I wonder if Mr. Aslin would care to say a word on his experiences of the application of the three foot four inch module to schools for use in Hertfordshire.

THE LECTURER: I am sure you do not require another dissertation from me! However, it clearly has, in my view, advantages although it obviously cannot be 100 per cent better than our earlier and larger ones. My experience with modular planning is that you know very little about it until you have built a school. In other words, you must practise the method in order to determine what the snags are. I defy anybody to guess at a module and be right. The architect is bound to find in the structure that there are snags and difficulties to be overcome which are easier in one than another. I think you have to simply do both, weigh them up in the balance and then determine which gives the best result.

MR. PHILLIP REECE: Might I ask a second question? Mr. Aslin referred to reducing the height of the ceiling to the scale of the child. It was difficult to judge from the picture he showed what that meant in terms of dimension. Are the classrooms lower than one would normally expect?

THE LECTURER: Eight feet nine inches is the present height in our junior schools, whereas the standard height used to be eleven feet. I think that is too big for an ordinary child who lives in a house with a seven-foot-six or eight foot ceiling.

MR. JOHN T. LEWIS, A.R.I.B.A.: Does the lecturer, with this form of heating that he uses, depend upon open windows for ventilation, or is there any other method?

THE LECTURER: No, we are dependent upon open windows, cracks in doorways, or any place where the wind can get in or out. Obviously the best arrangement for heating and ventilation in a building of that kind would be a closed system whereby you suck clean air in and push it out when you have finished with it. The reason it is not done is the cost. We have never developed any real system of heating other

than radiators, or pipes in floors and walls and so on; in this country we have never had to. We have always had cheap coal until quite recently and it did not matter if you wasted some of it. There has been no incentive until now. If it becomes practice to put such systems in small buildings, then we shall get it. If we live long enough we shall probably see it.

MR. J. L. SMITH: Can Mr. Aslin comment further on this question of single or multi-story building in terms of cost? It is clear that different schools want different treatment, but if you take, for instance, a junior school which could be either a single-storied building or a two-storied building, how does the cost work out for those two alternative ways of treatment?

THE LECTURER: I should be guessing the answer as, of course, we have never had junior schools of sufficient size to warrant their being built upwards.

MR. J. L. SMITH: How does it work for a two-department school, for instance, where you have boys and girls as separate groups?

THE LECTURER: I am sorry, we do not design in that way. Our schools are always mixed or of one sex, but they never have a wall between. I think there is no direct answer. I do not think you can ask, does it cost more in any building to go up three stories or one story? There is obviously a limit somewhere. If you were to decide to go up to seven stories, that would probably cost you a lot more money. But our building industry has been so illogical that unless you set up a sort of enquiry agency, as some people must, of course, to find the answer, you do not know the answer at all. It is just as if somebody is making chairs and he tells you that that chair is worth £5, and you go away and design a new chair and can prove that it is a better chair and that it takes less material, but it will cost you twice as much. That is the sort of thing that is wrong with our industry all the time, though I believe it is getting better.

THE CHAIRMAN: I am sure you wish me to thank Mr. Aslin for the fascinating talk which he has given us and the admirable slides which he has collected from unspecified sources. If I have a criticism, it is that with praiseworthy modesty he has underestimated the enormous change of heart and change of outlook which is behind all this revolution in school building and of which he himself has been one of the great progenitors.

However, in spite of that we thank him most sincerely for an extremely interesting and instructive lecture.

The vote of thanks was carried with acclamation and the meeting then ended.

GENERAL NOTES

ART AT THE EDINBURGH FESTIVAL

The Eighth International Festival of Music and Drama, which opened with a Service in the Cathedral Church of St. Giles on 22nd August, is following a now established pattern. Edinburgh has a sure sense of ceremony, and the Tattoo presented against the floodlit ramparts of the Castle, the daily march of the champion Police Pipe Band along Princes Street, and indeed the whole spectacle of the Scottish capital *en fête* remains as impressive as ever, especially at night. In the day-time, apart from flags and hanging baskets of flowers in Princes Street—a by no means overwhelming display, since there are buildings only on one side, and therefore no festoons or arches—that thoroughfare seems hardly changed since war-time when the loitering crowds were almost as dense, and the dialects heard almost as various as on this international occasion. Nevertheless the large white board above the Scottish Academy's building, announcing CÉZANNE in black letters and seen the moment one ascends from the Waverley Station, and another proclaiming MACBETH at the Assembly Hall, are sufficiently conspicuous reminders of this eventful season.

The drama, opening rather contentiously with Thornton Wilder's comic piece *The Matchmaker*, at the Lyceum, has given us also a superb *Macbeth* on the open stage of the Assembly Hall, with Paul Rogers adding immensely to his stature in that exacting role, and partnered not unworthily by Ann Todd as the most pitiless of Shakespeare's creatures. (One remembers Gielgud's tremendous performance of *Macbeth* in war-time Edinburgh, and the strain and weariness apparent through his courtesy when one later paid him respects in his dressing-room.) The Festival is also especially distinguished this year by its brilliant operatic productions, Glyndebourne early presenting *Ariadne auf Naxos* and Rossini's *Le Comte Ory*, while the cinema—that hybrid art, if it be an art—has generally risen to the occasion.

My own particular quest, of course, was the art exhibitions, and I was fortunate once again in having as my host and adviser Mr. C. d'O. Pilkington Jackson, a sculptor and monumental craftsman respected not only in Edinburgh, and a distinguished Fellow of this Society. He is, in fact, represented by three works in the *Personalities in Sculpture* display at the Art Centre in the High Street—a collection ranging from academic portraiture to the more expressionist bronzes of Epstein and Louise Hutchinson—a number of the contributors reappearing in an exhibition of religious sculpture at the Canongate Church, presented by the Society of Portrait Sculptors. Higher up the slope may also be found a fascinating exhibition of early Victorian Scottish photographs taken by D. O. Hill, who concentrated on portraiture, and Dr. Thomas Keith whose photographic activity was apparently confined to 1854–1855, and who left the unique studies of Edinburgh architecture which show that the Old Town has undergone very little change in the past hundred years, at any rate compared with the older parts of London. There are, of course, several collections elsewhere of contemporary Scottish painting, one of the most rewarding being the well selected and mainly romantic exhibition of the Society of Scottish Artists at 5 Charlotte Square.

Nevertheless the great artistic events of this Festival, without any doubt, are the homages to Cézanne and to Diaghilev—that impresario of genius who died twenty-five years ago. A Cézanne collection, by whomsoever gathered, could scarcely fail to impress; and the effect of the present one, beautifully assembled and prefaced by Professor Lawrence Gowing, was a foregone conclusion. But just what Mr. Richard Buckle had contrived to bring to light after months of chasing after Diaghilev relics was very much in doubt. In the event, he seems to have unearthed almost every conceivable souvenir of that despot's reign, and this homage to the Russian Ballet,

imaginatively staged at the College of Art by a team of students directed by Mr. Leonard Rosoman, is so fantastic that London should positively insist on the exhibition's journey south.



Serge Diaghilev

From the moment one deposits one's hat and umbrella with a reluctant official ensconced in a kind of grotto, until one reaches the exhibition's climax—the Hall of Giants with its baroque perspectives and gigantic statues of Negroes—one's senses are continually beguiled. Brilliant tableaux take the eye in the dim corridors. Exotic music fills the air. Reminiscences abound of Nijinsky, Pavlova, and Karsavina. There are the designs of Bakst, Picasso, Matisse, Derain, and Ernst. Paintings, posters, and caricatures everywhere revive an epoch that began in 1909 with *Le Pavillon d'Armide* and closed thirty years later with *Le Fils Prodigue*, the décor by Georges Rouault. Throughout one is conscious of the man of genius with a taste and acumen as sure as Cochran's. Diaghilev's peremptory letters, indeed, which are displayed here, bring one hard down to earth in a world of leaping immortals and intoxicating décors. Appropriately enough, three 'Diaghilev' ballets opened the Festival season—*La Boutique Fantasque*, *Le Tricorne*, and a revival of *Firebird*, with Margot Fonteyn, I am told, making an unforgettable impression in the title role of this last.

It might be thought that there could be no greater contrast than between the sensuous beauty and sophisticated decoration of the Diaghilev exhibition and the austere profundities of Cézanne. But, in fact, one is very aware of the sensuous qualities of Cézanne's early painting in his so-called *couillarde* manner, wrought with the knife and the swirling brush-strokes that alternated with it. Nor is there any hint of aridity in the noblest, most analytical works of his later period, masterpieces like *Le Lac d'Annecy*, where the rich blues and greens, violet and orange and pink sing in triumphant chorus. Perhaps critics have dwelt rather too exclusively on the master's painful progress in search of an underlying structural unity, and too little on his ravishing colour harmonies and those more superficial aspects of his painting which so often sweeten the intellectual pill. At all events, most visitors would agree that the greatest pleasure as well as profit is derived from surveying, in these sixty-five paintings drawn from American and European galleries, the artist's development from an early impassioned version of Delacroix's *Barque de Dante* to one of the last portraits of his gardener Vallier. It is a fitting homage to a most complex pioneer of modern art, whose influence is still far from spent.

The last word is due to the late Muirhead Bone, whose finest drawings, gathered in the Scottish Academy, attest the justice of Sir Kenneth Clark's comparison with the technical skill of Piranesi. Besides Bone's larger panoramic views, there are drawings of London and Oxford as refined as *The Old Mulberry Tree*, Merton,

a miraculous record of the fleeting effects of light. It may well be that his fame will rest as surely on his etching and drypoint, and indeed his brother Mr. David Bone reminds us that there is no important collection of etchings in the world that does not contain examples of Muirhead's work. The present withdrawal of sympathy from the topographical record certainly should not affect our recognition of the most gifted graphic reporter of our time.

NEVILLE WALLIS

TWO PRIZES

The Royal Meteorological Society announces the first competition for the Napier Shaw Prize. The competition will be open to anyone without restriction of nationality. The prize of £100 is offered on this occasion for an original essay on *The energetics of the general circulation*. The essay may include material which the candidate has already had published. Essays, which may be submitted jointly in the names of more than one author, must be received before 5th March, 1956. Details of the competition can be obtained from the Assistant Secretary, Royal Meteorological Society, 49 Cromwell Road, S.W.7.

The Council of the Royal Statistical Society offers the Frances Wood Memorial Prize of £40 for competition in 1954. This is offered for the best investigation, on statistical lines, of any problem, chosen by the competitor, which bears directly or indirectly upon economic or social conditions. This phrase may be interpreted widely and might, for example, concern housing, distribution, food production, health or nutrition, conditions of work, output, wages or expenditure, education or old age. Entries must be in before 30th September, 1954. Details can be obtained from the Honorary Secretaries to the Royal Statistical Society, 21 Bentinck Street, W.1.

OBITUARY

SIR HENRY STEWARD

We record with regret the death on 28th August at the age of 89 of Sir Henry Allan Holden Steward, T.D., who was a Vice-President of the Society from 1938 to 1941.

Sir Henry Steward began his career at the Bar in 1890 and subsequently was appointed Secretary of the Light Railway Commission of which he became a Commissioner and finally Chairman from 1918-22. He was prominent in the world of education and in particular took an active interest in the many educational foundations administered by the Skinners' Company of which he was Renter-Warden in 1903 and Master in 1908. He was a Governor of the Northampton Institute, a Vice-President of the City and Guilds Institute and for many years a member of the Examinations Committee of the Royal Society of Arts. His publications include a standard work on the *Law of Light Railways* and an *Introduction to the Records of the Skinners' Company*.

He was elected a Life Fellow of the Society in 1908.

SHORT NOTES ON BOOKS

FROM THE SKETCH TO THE FINISHED PICTURE: WATER-COLOUR PAINTING. By Leonard Richmond. Pitman, 1954. 25s

As its name suggests, this is a practical guide to all aspects of water-colour painting. The author gives hints on every aspect of the art and deals with the practical problems of many subjects. The book is illustrated with 48 half-tone and 11 colour plates, illustrating various stages in paintings.

EGYPTIAN PAINTINGS. *By Nina M. Davies. Penguin Books, 1954. 5s*

Seventeen illustrations by the author of Egyptian paintings are here reproduced in colour. They are accompanied by descriptive notes on their subject and location—usually a tomb. There is also an introduction in which the reason for, and method of, painting in ancient Egypt are briefly discussed.

LIFE DRAWING. *By John Napper and Nicholas Mosley. Studio, 1954. 15s*

This new volume in the *Studio* 'How to do it' series is written by the teacher of life drawing at the St. Martin's School of Art. After a general introduction on the technique of figure drawing the various stages of a drawing by the author have been photographed, and 11 more of his drawings and 16 by old masters are reproduced as the final part of the work.

A CONCISE HISTORY OF MATHEMATICS. *By Dirk J. Struik. Bell, 1954. 14s*

The Professor of Mathematics at the Massachusetts Institute of Technology here sets out to trace the development of the main ideas of mathematics from its earliest beginnings to the end of the nineteenth century. In the later stages, as the subject becomes more diverse, developments are treated under men and schools. The book is supplied with plates, bibliographies and an index.

A NEW MAP OF THE WORLD. *By Trystan Edwards. Batsford, 1953. 5s*

The aim of the new map projection described in this pamphlet is to show the whole world on a rectangular 'equal area' map with as little distortion as possible. Various other projections are discussed, and the result of the new projection, called by the author 'homalographic', is shown.

FIRST THROUGH THE CLOUDS. *By F. Warren Merriam. Batsford, 1954. 21s*

This is an account, by a pioneer of flying, of his experiences with aeroplanes from 1912 onwards. The author was the first man to fly through thick cloud into the sunlight beyond and was the instructor of many famous pilots.

LIBRARY ADDITIONS

EXHIBITIONS

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- KAY, FREDERICK GEORGE. *Pioneers of British industry* . . . *Rockliff*, 1952. (Presented by the author.)
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FROM THE JOURNAL OF 1854

VOLUME II. 1st September, 1854

From a further lecture delivered during the Educational Exhibition On the Study of the Arts, Architecture, Painting, and Sculpture, in Connection with Non-Artistic Education, by The Rev. M. Mitchell, H.M. Inspector of Schools.

He then exemplified different ways of looking at art: the matter-of-fact-man, the trifler, the artist, and the poet, quoting a passage of Byron to the point. To the man that knows nothing, you can teach nothing; and no one who spends life in mere pounds, shillings and pence, or in idle and profitless frivolity, can attain the artists' or the poet's satisfaction in regarding works of arts. He then branched off to busts, and the way to regard them—historically, actually—as regarded the characters or the workmanship itself. He dwelt upon the anatomical, phrenologic, and physionomic character, and stated that the gladiator form still was to be found in the mere military hero of to-day; while the elegant but licentious Alcibiades might still find his type in the busts of some of her Majesty's household troops. There was a compliment also to the female sex, and reference was made to the times of Antoninus Pius and Marcus Aurelius, as the periods most glorious to humanity except that of Queen Victoria.

